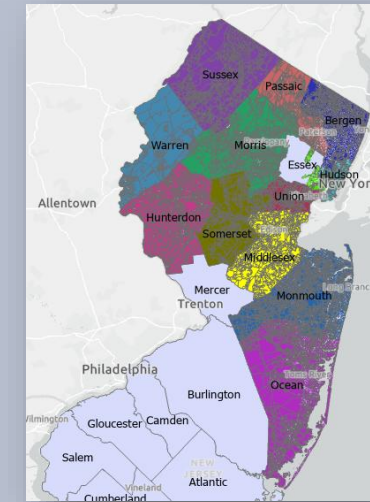
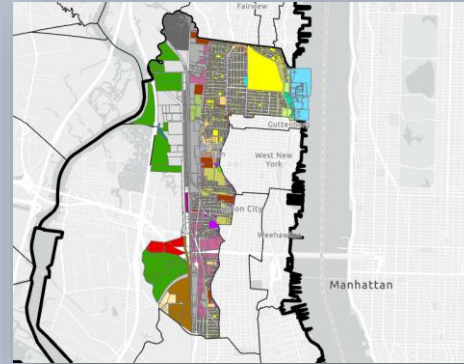
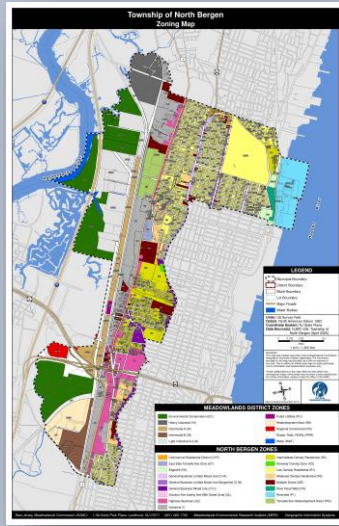




Creating a Zoning Atlas

RTAC Meeting

Rick Cippoletti, Senior Manager, Analytical and Planning Tools

October 13, 2026

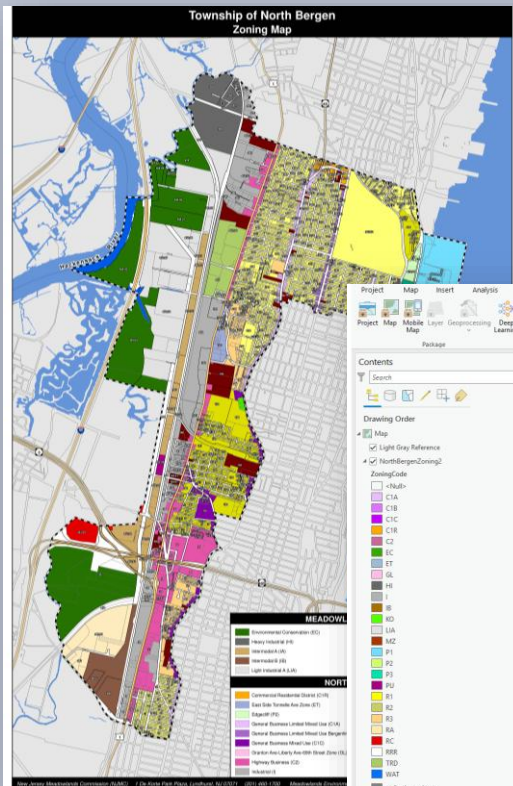
One Zoning Dataset — 384 Municipalities

- NJTPA built an ArcGIS layer that consolidates zoning across the region into a single dataset
- The Long Range Transportation Plan called for NJTPA to account for how housing impacts the transportation system
- Zoning is the clearest available view of housing and commercial land use
- 384 of New Jersey's 565 municipalities sit in the NJTPA region, and most maintain their own distinct zoning
- Pinelands Commission, NJ Sports and Exposition Authority, and Highlands Council zoning maintain their own zoning
- Delivered in GIS format, the dataset supports land use planning across the NJTPA region and better-informed zoning decisions
- This a dataset that cuts through zoning complexity across the region

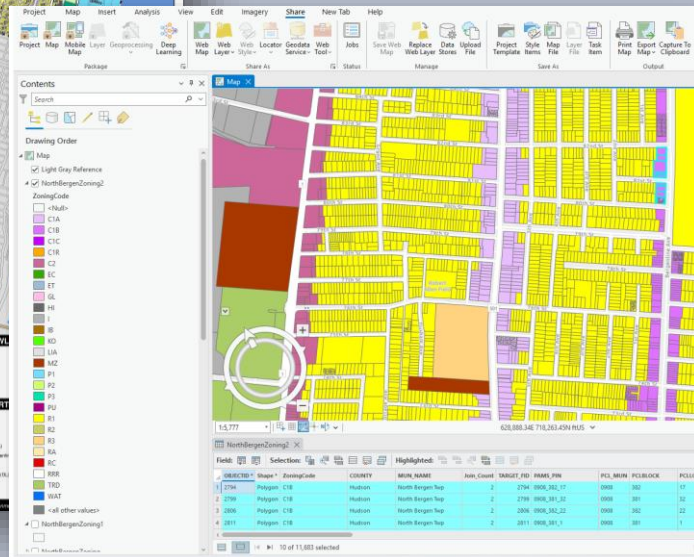
Pairing Spatial Mapping with Zoning Code Detail

Spatial

PDF Map

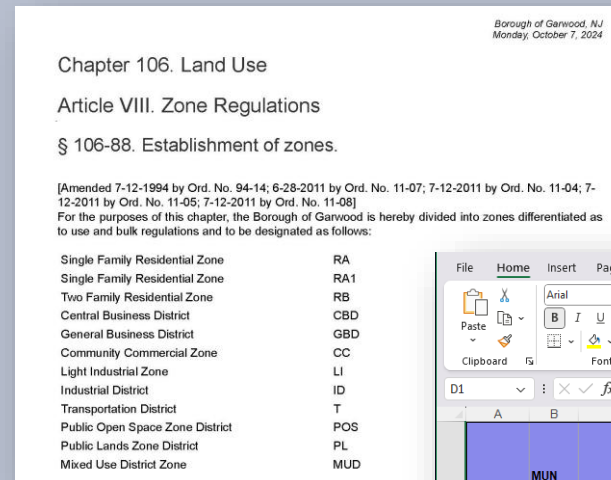


GIS Layer



Non-Spatial

Zoning code data



Zoning table

File Home Insert Page Layout Formulas Data Review View Automate Help				
Clipboard Font Alignment Number Styles				
D1 : X ✓ fx Abbreviated District Name				
	A	B	C	D
	MUN	Abbreviated District		
1	County	JT CODE	Jurisdiction	Full District Name
6363	Union	2006 Garwood	RA	Single Family Residential Zone
6364	Union	2006 Garwood	RA1	Single Family Residential Zone
6365	Union	2006 Garwood	RB	Two Family Residential Zone
6366	Union	2006 Garwood	CBD	Central Business District
6367	Union	2006 Garwood	GBD	General Business District
6368	Union	2006 Garwood	CC	Community Commercial Zone
6369	Union	2006 Garwood	LI	Light Industrial Zone
6370	Union	2006 Garwood	ID	Industrial District
6371	Union	2006 Garwood	T	Transportation District
6372	Union	2006 Garwood	POS	Public Open Space Zone District
6373	Union	2006 Garwood	PL	Public Lands Zone District
6374	Union	2006 Garwood	MUD	Mixed Use District Zone

Six Steps: Municipal Maps to One GIS Layer

- Locate zoning datasets already available in GIS format
- Identify zoning Municipal maps published as PDFs
- Verify existing GIS data against the latest municipal zoning map
- Align zoning data with up-to-date GIS parcel mapping
- Revise parcel zoning attributes to reflect the newest zone map
- Append parcels with zoning code tags to the GIS zoning layer

AI-assisted Data Collection Cut Zoning Updates by at Least 95%

- Zoning values in the Zoning Excel workbook are updated and corrected by invoking Claude Opus 4.7 and 4.8 through embedded Microsoft Copilot
- A 20-line natural language instruction set guides research, data extraction, and error checking`
- Claude reads published ordinance text from eCode360, municipal websites, and scanned PDFs, run from Microsoft Copilot
- Extraction covers permitted uses, dwelling types, and lot and density standards, for each zone
- Low-confidence, missing, or contradictory answers are flagged for human review
- Most municipalities take a single five-minute run, writing results straight into the zoning code table
- Earlier collection of this data depended entirely on manual effort

Complete Dataset Joined End to End

- Both the GIS layer and the non-spatial data are finished
- The GIS layer holds roughly 88,000 records, indexed by County, Municipality, and Zoning Code
- The zoning attribute table runs about 100 columns by 8,000 rows
- Joining the two yields the complete dataset
- A recurring update process is in development, likely using AI to isolate and apply changes

Using Claude with Copilot

ID	County	MUN	Jurisdiction	Jurisdiction Atlas	Zoning Code	Full District Name	Join	District Mapped	District Mapped But	Overlay	Redevelopment Area	Townhouse	Type of Zoning District	Affordable Housing
16	Sussex	1906	Franklin Borough	Franklin	R-2	Single-Family Residential (one acre)	1906_R-2	Yes				No	Primarily Residential	No
17	Sussex	1906	Franklin Borough	Franklin	R-3	Single-Family Residential (15,000 square feet)	1906_R-3	Yes				No	Primarily Residential	No
18	Sussex	1906	Franklin Borough	Franklin	R-4	Single-Family Residential (6,250 square feet)	1906_R-4	Yes				No	Primarily Residential	No
19	Sussex	1906	Franklin Borough	Franklin	ZM	Zinc Mine Mixed Use	1906_ZM	Yes			Yes	No	Mixed Use	No
20	Sussex	1907	Fredon Township	Fredon Township	AR	Agricultural Residential District	1907_AR	Yes		No		No	Primarily Residential	No
21	Sussex	1907	Fredon Township	Fredon Township	C	Conservation District	1907_C	Yes		No	No	No	Nonresidential	No
22	Sussex	1907	Fredon Township	Fredon Township	CF	Community Facilities	1907_CF	Yes		No	No	No	Nonresidential	No
23	Sussex	1907	Fredon Township	Fredon Township	CP	Community Park District	1907_CP	Yes		No	No	No	Nonresidential	No
24	Sussex	1907	Fredon Township	Fredon Township	LI	Light Industrial District	1907_LI	Yes		No	No	No	Nonresidential	No
25	Sussex	1907	Fredon Township	Fredon Township	MUMD	Mixed-Use Market District	1907_MUMD	Yes		No	No	Yes	Mixed Use	Yes
26	Sussex	1907	Fredon Township	Fredon Township	P	Public District	1907_P	No	No	No	No	No	Nonresidential	No
27	Sussex	1907	Fredon Township	Fredon Township	PD	Planned Residential Development District	1907_PD	No		No	No	Yes	Primarily Residential	Yes
28	Sussex	1907	Fredon Township	Fredon Township	PRRD	Planned Golf Course Recreational/Residential	1907_PRRD	Yes		No	No	No	Primarily Residential	No
29	Sussex	1907	Fredon Township	Fredon Township	R-1	Residential District	1907_R-1	Yes		No	No	No	Primarily Residential	No
30	Sussex	1907	Fredon Township	Fredon Township	R-4	Residential District	1907_R-4	Yes		No	No	No	Primarily Residential	No
31	Sussex	1907	Fredon Township	Fredon Township	R-6	Residential District	1907_R-6	Yes		No	No	No	Primarily Residential	No
32	Sussex	1907	Fredon Township	Fredon Township	RA	Residential Agricultural District	1907_RA	Yes		No	No	No	Primarily Residential	No
33	Sussex	1908	Green Township	Green Township	AI-10	Agricultural Industrial District	1908_AI-10	Yes	No	No	No	No	Nonresidential	No
34	Sussex	1908	Green Township	Green Township	AR-SI/2	Agricultural Industrial District	1908_AR-SI/2	Yes	No	No	No	No	Primarily Residential	No
35	Sussex	1908	Green Township	Green Township	NC	Neighborhood Commercial District	1908_NC	Yes	No	No	No	No	Mixed Use	No
36	Sussex	1908	Green Township	Green Township	R-1	Residential District	1908_R-1	Yes	No	No	No	No	Primarily Residential	No
37	Sussex	1908	Green Township	Green Township	R-15	Residential District	1908_R-15	Yes	No	No	No	No	Primarily Residential	No
38	Sussex	1908	Green Township	Green Township	RB	Rural Business District	1908_RB	Yes	No	No	No	No	Mixed Use	No
39	Sussex	1909	Hamburg	Hamburg	AAPR	Active Adult Planned Residential	1909_AAPR	Yes	Yes	No	No	No	Primarily Residential	No
40	Sussex	1909	Hamburg	Hamburg	BC	Borough Center	1909_BC	Yes	No	No	No	No	Mixed Use	No
41	Sussex	1909	Hamburg	Hamburg	C	Conservation District	1909_C	Yes	Yes	No	No	No	Nonresidential	No
42	Sussex	1909	Hamburg	Hamburg	CR	Commercial Recreation	1909_CR	No	No	No	No	No	Nonresidential	No
43	Sussex	1909	Hamburg	Hamburg	HC	Highway Commercial	1909_HC	Yes	No	No	No	Yes	Nonresidential	No
44	Sussex	1909	Hamburg	Hamburg	I	Light Industrial	1909_I	Yes	No	No	No	No	Nonresidential	No
45	Sussex	1909	Hamburg	Hamburg	LI	Limited Industrial	1909_LI	No	No	No	No	No	Nonresidential	No
46	Sussex	1909	Hamburg	Hamburg	P	Public Use	1909_P	Yes	No	No	No	No	Nonresidential	No
47	Sussex	1909	Hamburg	Hamburg	PC	Planned Commercial	1909_PC	Yes	No	No	No	No	Nonresidential	No
48	Sussex	1909	Hamburg	Hamburg	PD	Planned Development	1909_PD	Yes	No	No	No	Yes	Mixed Use	No
49	Sussex	1909	Hamburg	Hamburg	PR	Planned Residential	1909_PR	Yes	No	No	No	Yes	Primarily Residential	No
50	Sussex	1909	Hamburg	Hamburg	RO	Residential/Office	1909_RO	Yes	No	No	No	No	Mixed Use	No
51	Sussex	1909	Hamburg	Hamburg	RPR	Restricted Planned Residential Development	1909_RPR	No	No	No	No	No	Primarily Residential	No
52	Sussex	1909	Hamburg	Hamburg	RR	Residential	1909_RR	Yes	No	No	No	No	Primarily Residential	No
53	Sussex	1910	Hampton Township	Hampton Township	APT/TH	Apartment/Townhouse Multiple-Family Residential	1910_APT/TH	Yes	No	No	No	Yes	Primarily Residential	No
54	Sussex	1910	Hampton Township	Hampton Township	HC	Highway Commercial District	1910_HC	Yes	No	No	No	No	Nonresidential	No
55	Sussex	1910	Hampton Township	Hampton Township	HC-MFG	Highway Commercial - Manufacturing - Industrial	1910_HC-MFG	Yes	No	No	No	No	Nonresidential	No
56	Sussex	1910	Hampton Township	Hampton Township	HC-R	Highway Commercial - Residential District	1910_HC-R	Yes	No	No	No	No	Mixed Use	No
57	Sussex	1910	Hampton Township	Hampton Township	HC-RD	Highway Commercial - Research - Development	1910_HC-RD	Yes	No	No	No	No	Nonresidential	No
58	Sussex	1910	Hampton Township	Hampton Township	NC	Neighborhood Commercial District	1910_NC	No	No	No	No	No	Nonresidential	No
59	Sussex	1910	Hampton Township	Hampton Township	R-15	R-15 Single-Family Residential District	1910_R-15	Yes	No	No	No	No	Primarily Residential	No
60	Sussex	1910	Hampton Township	Hampton Township	R-2	R-2 Single-Family Residential District	1910_R-2	Yes	No	No	No	No	Primarily Residential	No
61	Sussex	1910	Hampton Township	Hampton Township	R-3	R-3 Single-Family Residential District	1910_R-3	Yes	No	No	No	No	Primarily Residential	No
62	Sussex	1911	Hardyston Township	Hardyston Township	B-1	B-1 Neighborhood Business District	1911_B-1	Yes	No	No	No	No	Mixed Use	No
63	Sussex	1911	Hardyston Township	Hardyston Township	B-2	B-2 Highway Business Service District	1911_B-2	Yes	No	No	No	No	Mixed Use	No
64	Sussex	1911	Hardyston Township	Hardyston Township	C-R	C-R Commercial Recreation District	1911_C-R	Yes	No	No	No	No	Nonresidential	No
65	Sussex	1911	Hardyston Township	Hardyston Township	C-R (VC)	C-R Commercial Recreation District (Village Corridor)	1911_C-R (VC)	Yes	No	No	No	Yes	Mixed Use	No
66	Sussex	1911	Hardyston Township	Hardyston Township	G-C	G-C Golf Course	1911_G-C	Yes	Yes	No	No	No	Nonresidential	No

located within this document: Green zoning requirement2.pdf. Green zoning bulk standards are also located in the narrative of the chapter. Determine if townhouses are allowed and update in the Townhouse Column. Also, for bulk standards provide specific bulk and design standards for each building type. If the zone is a redevelopment area, populate column Redevelopment Area. If the zone is an Overlay area, populate column Overlay Area. Make sure 2-family and multi-family columns are captured and updated. For Bulk Standards, do not update for Nonresidential. Make sure ADU records in the table are populated. If pre-populated cells are incorrect, please update with new data.

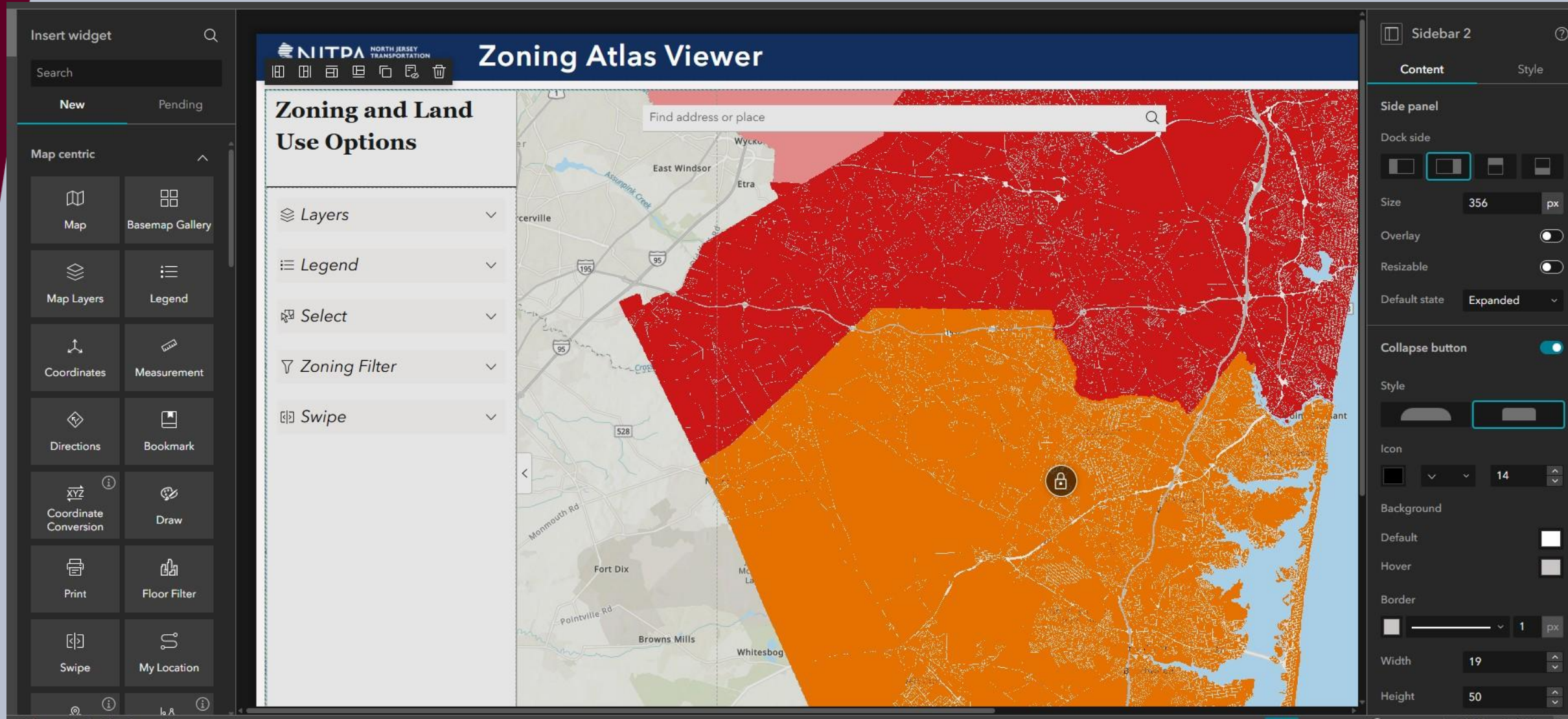
Copilot

Edit

Describe what you'd like to edit

AI-generated content may be incorrect

Zoning Atlas Viewer – Experience Builder



Creating a Standard Update Process

- Set an update schedule for both spatial and non-spatial zoning data
- Build a reporting mechanism that captures zoning changes as they occur
- Partner with subregions and municipalities for timely notice of changes
- Embed the effort in NJTPA's ongoing workplan
- Partner with other state agencies who use zoning data as part of their work

What's Next

- Use zoning data as a core input to land use planning across the region
- Give subregional partners and municipalities ready access to the data
- Possibly expand the Atlas to affordable housing, redevelopment plans, and commercial information
- Explore the dataset as a supplement to NJRTM-E, NJTPA's transportation model
- This dataset can help to reduce zoning inconsistencies, strengthen data quality, and contribute to a statewide zoning database

Questions?

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